

## EAST Search History

S12 5	230041	"73"/\$.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/04/09 23:26
S12 6	0	transducer near3 (chamber or pipe or reservoir) near3 acoustic near2 fluid near3 reflect\$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/04/09 23:27
S12 7	1	transducer near3 (chamber or pipe or reservoir) near3 acoustic near3 fluid near3 reflect\$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/04/09 23:27
S12 8	2	transducer near3 (chamber or pipe or reservoir) near5 acoustic near3 fluid near3 reflect\$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/04/09 23:27
S12 9	1	("6647804").URPN.	USPAT	OR	ON	2007/04/09 23:31
S13 0	1	("6647804").URPN.	USPAT	OR	ON	2007/04/09 23:32
S13 1	27	("4083246"   "4365829"   "4386409"   "4397191"   "4452090"   "4484478"   "4742717"   "4754650"   "4787252"   "4823612"   "4928534"   "5020374"   "5179862"   "5251490"   "5277070"   "5329821"   "5421211"   "5515733"   "5615173"   "5808195"   "5821427"   "5880377"   "5896885"   "5967567"   "6378357"   "RE35535").PN. OR ("6647804"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/04/29 15:36
S13 2	2	("5808195").URPN.	USPAT	OR	ON	2007/04/09 23:37
S13 3	1	10/821767	US-PGPUB; USPAT; USOCR	OR	ON	2007/04/29 15:36

## EAST Search History

S13 4	954	73/629	US-PGPUB; USPAT; USOCR	OR	ON	2007/04/29 15:37
S13 5	160	S134 and reflector	US-PGPUB; USPAT; USOCR	OR	ON	2007/04/29 17:15
S13 6	16	electromagnetic adj3 coil near3 reflector	US-PGPUB; USPAT; USOCR	OR	ON	2007/04/29 17:38
S13 7	1	"5900546".pn.	US-PGPUB; USPAT; USOCR	OR	ON	2007/04/29 19:43
S13 8	0	reflector near3 disc near5 (borehole or downhole)	US-PGPUB; USPAT; USOCR	OR	ON	2007/04/29 19:45
S13 9	4	reflector near3 disc near5 fluid	US-PGPUB; USPAT; USOCR	OR	ON	2007/04/29 21:12
S14 0	1332	reflector near3 disc movable same transducer near5 fluid	US-PGPUB; USPAT; USOCR	OR	ON	2007/04/29 21:12
S14 1	1876	reflector near3 disc movable same transducer near5 fluid	US-PGPUB; USPAT; USOCR	OR	ON	2007/04/29 21:12
S14 2	1470	reflector near3 disc movable same transducer near5 fluid same piston	US-PGPUB; USPAT; USOCR	OR	ON	2007/04/29 21:13
S14 3	1338	reflector near3 disc movable same transducer near5 fluid same piston same (borehole or downhole)	US-PGPUB; USPAT; USOCR	OR	ON	2007/04/29 21:13
S14 4	12596	(acoustic\$4 or sonic\$4 or ultrasonic\$4 or sound\$3 or ultrasound\$3 or supersonic\$4 or supersound\$3) same (velocity or volume or density or compressibility with viscosity) same fluid	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/04/29 21:14
S14 5	2	S143 and S144	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/04/29 21:37
S14 6	2	"4277976".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/04/29 21:37

## EAST Search History

S14 7	2377921	piston or rod	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/04/30 07:21
S14 8	884741	piston or rod and reflector	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/04/30 07:21
S14 9	859268	piston or rod and reflector near5 fluid	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/04/30 07:21
S15 0	0	(piston or rod) and reflector near3 (disc or disk) near5 fluid with transducer	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/04/30 07:22
S15 1	3	(piston or rod) and reflector near3 (disc or disk) near5 fluid	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/04/30 07:30
S15 2	2	"7197975".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/04/30 07:33
S15 3	0	"Re.""33837".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/04/30 07:34
S15 4	3	"33837".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2007/04/30 07:34
S15 5	0	"33837".pn.	USPAT	OR	ON	2007/04/30 07:35
S15 6	5	"389669"	USPAT	OR	ON	2007/04/30 07:35
S15 7	1	("RE33837").URPN.	USPAT	OR	ON	2007/04/30 09:10
S15 8	0	reflector near5 movable near5 transducer near3 fluid	USPAT	OR	ON	2007/04/30 09:11

## EAST Search History

S15 9	1875	reflector near5 movable	USPAT	OR	ON	2007/04/30 09:11
S16 0	5	reflector near5 movable near5 fluid	USPAT	OR	ON	2007/04/30 09:12
S16 1	0	reflector near5 movable near5 (chamber or tank or vessel) with (liquid or fluid)	USPAT	OR	ON	2007/04/30 09:13
S16 2	27	reflector near5 movable near5 (chamber or tank or vessel)	USPAT	OR	ON	2007/04/30 09:14
S16 3	1875	reflector near5 movable	USPAT	OR	ON	2007/04/30 09:15
S16 4	26	reflector near5 movable same fluid	USPAT	OR	ON	2007/04/30 09:54
S16 5	0	transducer and receiver near5 piezoelectric same fluid	USPAT	OR	ON	2007/04/30 09:54
S16 6	0	transducer and receiver near5 piezoelectric	USPAT	OR	ON	2007/04/30 09:55
S16 7	0	transducer and receiver near5 piezoelectric	USPAT	OR	ON	2007/04/30 09:55
S16 8	0	(transducer and receiver) near5 piezoelectric	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/04/30 09:55
S16 9	31	(transducer or receiver) near5 piezoelectric	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/04/30 09:58
S17 0	10	piezoelectric with transducer and receiver	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/04/30 09:58
S17 1	17	("5644186").URPN.	USPAT	OR	ON	2007/04/30 10:48
S17 2	543	(downhole or borehole) near3 piston	USPAT	OR	ON	2007/04/30 10:49
S17 3	8	(downhole or borehole) near3 piston with slidable	USPAT	OR	ON	2007/04/30 11:03

## EAST Search History

S17 4	26	(downhole or borehole) near3 piston with slidable	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/04/30 11:05
S17 5	1	10/821767	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/04/30 11:05